



POWER PLANT - ELECTRICAL HARNESS - INTRODUCTION OF PRODUCTION STANDARD EEC HARNESS TO
SUIT FCOC FUEL TEMPERATURE THERMOCOUPLE WITH STUD TYPE THERMOCOUPLE - CATEGORY CODE 7
- MOD.ENG-71-0183

1. Planning Information

A. Effectivity

- (1) Aircraft: (a) Airbus A319
(b) Airbus A320
(c) Airbus A321
(d) McDonnell Douglas MD-90
- (2) Engines: (a) V2522-A5 Engines prior to Serial No.V10154
(b) V2524-A5 Engines prior to Serial No.V10154
(c) V2527-A5 Engines prior to Serial No.V10154
(d) V2530-A5 Engines prior to Serial No.V10144
(e) V2525-D5 Engines prior to Serial No.V20037
(f) V2528-D5 Engines prior to Serial No.V20037

B. Concurrent Requirements

This Service Bulletin must be fitted to engines which embody IAE V2500 Service Bulletin ENG-73-0071 or ENG-73-0075. (Refer to 1.L.)

C. Reason

(1) Condition

Category II fault messages for the fuel temperature have occurred on in-service engines.

The problem is caused by resonance of the right-angled backshell of the fuel thermocouple on the EEC harness - Loom C.

(2) Background

As (1) above.

(3) Objective

The purpose of this Service Bulletin is designed to maintain reliability.

(4) Substantiation

A satisfactory engineering analysis has been done on the changes introduced by this Service Bulletin. Tests on development engines included a full 150 hour modification type test.

(5) Effect of Bulletin on Workshop procedures:

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Removal/Installation	Affected
Disassembly/Assembly	Not affected
Cleaning	Not affected
Inspection/Check	Not affected
Repair	Not affected
Testing	Not affected

(6) Supplement Information

None.

D. Description

(1) The changes introduced by this Service Bulletin are as follows:

(a) The harness assembly has changed, the changes are as follows:

A5 Model

- (i) An additional thermocouple harness is introduced, with 4 integral terminal tags.
- (ii) The connector plug assembly at position 4017KS-A is deleted along with all of its constitutional parts.

D5 Model

- (iii) Two additional thermocouple harnesses are introduced, with 4 integral terminal tags.
- (iv) The connector plug assembly of position P1-8050 is deleted along with all of its constituent parts.

E. Approval

The part number changes and/or part modifications are given in section 2 and 3 of this Service Bulletin. They obey the federal aviation regulations and are FAA-APPROVED for the engine model listed.

F. Compliance

Category Code 7

This Service Bulletin can be done when there are no initial parts remaining.

G. Manpower

Estimate of man-hours necessary to do this Service Bulletin in full:

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Venue	Estimated Man-hours
(1) In service	Not applicable
(2) At overhaul	Not affected

NOTE: It is possible to get access to the parts affected by this Service Bulletin at overhaul.

H. Material - Price and Availability

- (1) A modification kit is not necessary.
- (2) See "Material Information" section for prices and availability of spares.

I. Tooling

Special tools are not necessary.

J. Weight and Balance

A5 Model

- (1) Weight change Minus 0,05 kg (0.1lb.)
- (2) Moment arm 584 mm (23.0in.) forwards
- (3) Datum Engine front mount centreline
(Power Plant Station - PPS 100)

D5 Model

- (1) Weight change Minus 0,05 Kg (0.1lb.)
- (2) Moment arm 348 mm (13.7in.) forwards
- (3) Datum Engine front mount centreline
(Power Plant Station - PPS 100)

L. References

- (1) Internal Reference No.

EC95VR012

EC95VR012A

EC95VR012B

- (2) Other References

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The IAE V2500 Service Bulletin that follows must be installed before this Service Bulletin:

ENG-73-0071 Engine - Fuel and Control - Replacement of fuel temperature thermocouple with stud and nut terminations.

or

ENG-73-0075 Power Plant - EEC Fan Harness - Introduction of EEC Harness to suit FCOC fuel temperature thermocouple connector with stud type terminals.

The V2500 Engine Manual, Chapter/Section 72-00-32, Removal/Installation.

M. Publications affected:

- (1) The V2500 Illustrated Parts Catalog, Chapter/Section 71-51-41 and 71-51-59.
- (2) The V2500 Engine Manual, Chapter/Section 72-00-32, Removal/Installation.



2. Accomplishment Instructions

A. Rework Instructions

None.

B. Assembly Instructions

- (1) For the correct installation procedure for the harnesses refer to the V2500 Engine Manual, Chapter/Section 72-00-32, Removal/Installation.

C. Recording Instructions

- (1) A record of accomplishment is necessary.



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3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
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A5 Model

For engines incorporating EC93VR081 but not EC93VR058 and EC94VR052

6A6441 (71-51-41)	1		Harness assy - EEC Fan	6A5556 (01-005)	(S1)(K)
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For engines incorporating EC94VR052

6A6439 (71-51-41)	1	52340.00	Harness assy - EEC Fan	6A5963 (01-005)	(A)(B)(S1)
- (71-51-41)	1		Clamp, backshell	ESC66E14 (03-410)	(C)(H)(1D)
- (71-51-41)	1	4.56	Bush-cable support	ESC53-28 (03-817)	(F)(2D)
- (71-51-41)	1		Connector	ESC10SE614 07SNO (04-410)	(C)(H) (1D)
- (71-51-41)	3		Contact, socket	ESC30S16BC (04-417)	(C)(H) (1D)
- (71-51-41)	2		Socket - contact	BT4116- 10PY165 (04-427)	(C)(H) (S2)(1D)
- (71-51-41)	Ref		Socket - contact	BT4116-10P (04-427)	(C)(H) (S2)(1D)
- (71-51-41)	2		Socket - contact	BT4116- 10RY165 (04-428)	(C)(H) (S3)(1D)

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- (71-51-41)	Ref		Socket - contact	BT4116-10R (04-428)	(C)(H) (S3)(1D)
- (71-51-41)	3		Plug Sealing	MS3187- 16-2 (04-429)	(C)(H) (1D)
HAB22416 (71-51-41)	2		Lead assy, thermocouple	- (04-900)	(A)(F)(J)
D5 Model					
6A6440 (71-51-59)	1	20650.00	Harness assy - fan case EEC common channel A/B - Loom C	6A4428 (01-005)	(A)(B)(S1)
HAB22497 (71-51-59)	1		Harness	- (03-505)	(A)(G)(J)
HAB22498 (71-51-59)	1		Harness	- (03-506)	(A)(G)(J)
- (71-51-59)	1		Bush - cable support	ESC53-28 (03-818)	(E)(H) (1D)
- (71-51-59)	1		Connector	ESC10SE614 07SNO (04-210)	(E)(H) (1D)
- (71-51-59)	3		Contact, socket	ESC30S16BC (04-218)	(E)(H) (1D)
- (71-51-59)	2		Contact, socket	ESC30S16NC (04-219)	(E)(H) (1D)
- (71-51-59)	2		Contact - socket	ESC30S16NA (04-220)	(E)(H) (1D)
- (71-51-59)	1		Backshell	ESC66D14 (04-225)	(E)(H) (1D)
- (71-51-59)	3		Plug	BT4016-60P (04-990)	(E)(H) (S4)(1D)
- (71-51-59)	Ref		Plug	3400-152- 016 (04-990)	(E)(1D) (S4)

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NOTE: The 1997 unit prices shown are an estimate and they are given for the purpose of planning only. For information about actual prices, refer to the IAE Price Catalog or contact IAE's Spare Parts Sales Department.

C. Instructions/Disposition Codes:

- (A) New part is currently available.
- (B) Old part will be discontinued.
- (C) Previously part of Harness assembly 6A5963.
- (E) Previously part of Harness assembly 6A5963.
- (F) Part of Harness assembly 6A6439 and 6A6441.
- (G) Part of Harness assembly 6A6440.
- (H) Deleted part.
- (J) Additional.
- (K) New part will not be made available as a replenishment spare.
- (S1) Old and new parts are not interchangeable.
- (S2) Old parts coded (S2) are alternatives.
- (S3) Old parts coded (S3) are alternatives.
- (S4) Old parts coded (S4) are alternatives.
- (1D) Old part may be used up on other applications.
- (2D) Quantity reduced from 9 to 8.